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**RE: [Docket No. 990927266-9266-01; I.D. 072699A]  
RIN 0648-AM62 Taking Marine Mammals Incidental to Navy Operations of  
Surveillance Towed Array Sensor System Low Frequency Active Sonar**

Several things are, by now, crystal clear. First and foremost, active sonar as proposed herein is a fabulously lethal, loose cannon, decimating our marine cousins in an inescapable and merciless manner. Next substantial numbers of private persons are both aware of the program and unalterably opposed to its continuance in any form whatsoever. Moreover they have well voiced their strong feelings and beliefs together with the insistence that the issue demands a thorough public discussion and further that this must be promoted by the the formal auspices of the responsible agency. Issues of real versus phantasmagorical threats, the nature, quality and thrust of money driven enterprises prospering upon underwater hardware of all kinds and dependent upon the military procurements of various nations as all this relates to what even the most reactionary xenophobe must recognize as a trembling biosphere... better, a living planet, are inextricably melded in the US Navy's application. And they will out, but when, but when? Public confoundment as well as awareness has reached critical mass and beyond. We do not condone even one more incidental exploded skull out there! And we demand our most fundamental, inalienable right, quest for the truth by public process.

I include the following which I endorse.

"March 2000, Ken Balcomb discovered a whale dying in the water at his back doorstep. He soon discovered other whales dying in the area as well. He, along with the help of Diane Claridge and others, attempted to rescue several species of cetacean as they stranded in the Bahamas. Simultaneously, he recorded these events on video and created documentation that has helped to support the evidence that whales are dying in direct coincidence to the use of Navy sonars.

We at the Ocean Mammal Institute acknowledge the importance of the information in the following letter written by Ken Balcomb to J.S. Johnson, SURTASS LFAS Program Manager, dated February 23, 2001. To ensure that all the key points Ken Balcomb expresses are understood by those outside of the scientific community, we have listed below the 7 most critical issues of the letter:

1 As a result of an investigation of the stranding in the Mediterranean in 1995, correlated with NATO Low Frequency Active Sonar (LFAS) tests, NATO and the U.S. Navy have known the resonance frequency of airspaces in Cuvier's beaked whales since 1998, (page H2, SACLANTCEN M-133).

2. The resonance frequency of these whales' airspaces almost precisely match the frequencies of LFAS and powerful mid-range sonars.

3. When Cuvier's beaked whales are exposed to high intensity sonar at their airspace resonance frequency via LFAS or mid-range sonar can be painful and life threatening. Envision a football squeezed to the size of a ping-pong ball by air pressure alone. Now envision this ping -pong ball compressing and decompressing hundreds of times per second. Imagine this ping -pong ball located in your head, between your two ears. This is what the Cuvier's beaked whales experienced as a result of the Navy's sonar testing in the Bahamas in March 2000. Airspace resonance phenomena resulted in hemorrhaging which caused the stranding and deaths in the Bahamas.

4. Evidence is clear that the whales in the Bahamas stranding in 2000 and the Mediterranean stranding in 1995 were exposed to high intensity sonars (LFAS in the Mediterranean and the Navy's standard mid-range sonar in the Bahamas) at received levels well below 180 dB, the sound level presumed to be "safe" by the Navy. In fact the whales in the Mediterranean stranding were exposed to a received level of 150 dB of LFAS according to calculations by the Navy (NATO, Annex G).

Therefore, based on two significant mass strandings and deaths (Greece in 1998 and the Bahamas in 2000) evidence indicates that not only is airspace resonance with LFAS and other sonar frequencies a problem for beaked whales, but also the sound pressure level of 180 dB received level is not safe, and is probably not safe for other cetaceans as well (two minke whales and a dolphin also stranded in the Bahamas).

5. The Navy says they will not use LFAS if whales are seen in the area. Unfortunately, the lethal impact of this sonar, especially at airspace resonance frequency, can affect marine mammals who are 20-100 kilometers or more away from the deploying ship. Shipboard observers obviously could not see whales at these distances.

6. Before the Bahamas stranding researchers sighted beaked whales a dozen or more times a year in the area. In the year after the Bahamas stranding they saw beaked whales only once and they were two previously unidentified whales who were probably new arrivals to the area.

7. Ken Balcomb believes it is probable that all Cuvier's beaked whales in the region were killed by the naval sonar. Therefore, he concludes that LFAS cannot be deployed with only minimal harm to marine mammals and he cannot legally or morally support any recommendation to deploy LFAS as proposed."

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I add my voice to the above comment and critique. Further the untrammelled lethality of LFAS requires scientifically valid protection strategies. The applicant asserts that OBIA areas in which no anthropogenic sonar will be deployed is an appropriate strategy. However this alone is not technically valid:

1. At the present time there is no scientifically valid monitoring of the OBIA's. There are no dedicated hydrophone arrays cable or rf linked to computers and thence to a vessel monitoring entity. There is no equipment which is not off-the-shelf for such a system. There are two preserves, Glacier Bay National Park and The Whale Museum which presently monitor underwater sounds. They do not presently use a technically valid threshold for vessel alert purposes. Such a threshold would be the loudest natural sound level occurring in these areas. The tactical vessels cannot perform valid monitoring. Because they have no sensors in the protected areas because they are not allowed to be in the protected areas. Also the perimeters of the OBIA's are not precisely defined according to anthropogenic sound level reaches. That is to say there has to be an outer and inner perimeter. The outer perimeter is a no entry limit with the effect that even a transmission at the edge will not travel to the inner perimeter which defines the OBIA. Perimeter integrity requires continuous vessel monitoring by a qualified entity.

2. The application does not provide a scientifically valid strategy for compliance with Biological Removal limits for various species, some of which are zero.

3. The application lacks a comprehensive database of all vulnerable Marine Protected Areas which, if not within an OBIA, require exactly the same tactical constraints which are no entry of LFAS vessels beyond the outer perimeter together with acoustic monitoring within the protected area implemented by vessel monitoring.

4. The application logic depends on the existence of enemy tactical underwater vessels tuned for silent running, Kilo and Victor class submarines et al. And which vessels pose and **imminent** threat to the lives and property of US citizens. The application lacks verifiable factual support or such an assertion.

  
James Harrington

There is a power the eskimos call Sila, which is not to be explained in simple words. A great spirit supporting the world and the weather and all life on earth, a spirit so mighty that what it says to mankind is not thru words , but by storms and snow and rain and fury of the sea; all the forces of nature that men fear. But she has also another way of speaking: by sunlight and whalesong in a calm sea - little children innocently at play, themselves understanding nothing. Children hear a soft and gentle voice, almost like that of a woman. It comes to them in a mysterious way, but so gently that they are not afraid, they only hear that some danger threatens. And the children mention it casually when they come home. And it is then the business of the earth steward to take such measures as shall guard against the danger. When all is well, Sila sends no message to mankind, but withdraws into its own endless imagination apart. So she remains as long as men do not abuse life, but act with reverence to all life.

No one has seen Sila - her place being a mystery, in that she is at once among us and unspeakably far away.

So I recommend to you, the stewards of the earth, take this question of the sound sword to the children in their schools, and spoken in a way so that they can understand the both the benefits and the true dangers that men and women of learning fear for the great and small ones of the vast oceans trusting that the young, attending to a voice we can no longer hear, will guide us truly and well.